

ABSTRACT

Powdered starting material utilized for molding (e.g., rotational molding, injection molding, blow molding), extrusion, and the like can be preheated to reduce the time required to complete the processing of the material. After being preheated to a temperature below a melting temperature of the powder, the powder is transferred to a processing station. For example, in a rotational molding system, the preheated powder is transferred to a mold, where the preheated powder is melted and the mold is rotated such that the molten material adheres to the walls of the mold. After obtaining a desired distribution of the material over the walls of the mold, the temperature of the mold is decreased as rotation of the mold continues. When the article is sufficiently cooled, the article is removed from the mold.